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ADMINISTRATIVE RECORD

THE MOUNT SINAI MEDICAL CENTER

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Sinai Hospital

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A sample of Monokote MK-5 has been prepared and analyzed by transmission electron microscopy, selected area electron diffraction, and microchemical analysis; using energy-dispersive X-ray analysis. The results show that mineral fibers are present in the sample which have properties consistent with asbestiform tremolite. This conclusion is based on morphological, crystal structural and microchemical analyses. This conclusion is further supported by a comparison with analysis of a tremolite standard from the Libby, Montana vermiculite ore, from which MK-5 is derived. The MK-5 and the tremolite standard have the same ratios of Ca:Si and Mg:Si, as well as similarities in their contents of potassium and iron. Other mineral fibers present in MK-5 include other aluminosilicates, calcium oxide or carbonate and titanium dioxide. The length:width ratios of the tremolite fibers observed are typically 10:1, and greater. The width of the fibers is typically 0.5 micrometers, or less. This narrow width would render the fibers very difficult to be seen and identified by optical microscopy. Precise quantification of the tremolite content of the sample is difficult. It may be estimated that the tremolite content is on the order of 1 percent, by volume.

Please contact me if there are questions regarding these results.

Respectfully submitted,

Handwritten signature of Arthur N. Rohl

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